

Reference List

1927. Toggweiler, J. R. and Key, Robert M. Thermohaline Circulation. Encyclopedia of Atmospheric Sciences 4, 1549-1555. 2003.
1928. Gloor, M., Gruber, N., Sarmiento, J, Sabine, C. L., Feely, R. A., and Rodenbeck, C. A first estimate of present and preindustrial air-sea CO₂ flux patterns based on ocean interior carbon measurements and models. *Geophysical Research Letters* 30(1), 10-1 - 10-4. 2003.
1929. Lau, Ngar-Cheung and Nath, Mary Jo. Atmosphere-ocean variations in the Indo-Pacific sector during ENSO episodes. *Journal of Climate* 16(1), 3-20. 2003.
1931. Garrett, Timothy J., Russell, Lynn M., Ramaswamy, V., Maria, teven F., and Huebert, Barry J. Microphysical and radiative evolution of aerosol plumes over the tropical North Atlantic Ocean. *Journal of Geophysical Research* 108(D1), 11-1- 11-16. 2003.
1931. Garrett, Timothy J., Russell, Lynn M., Ramaswamy, V., Maria, teven F., and Huebert, Barry J. Microphysical and radiative evolution of aerosol plumes over the tropical North Atlantic Ocean. *Journal of Geophysical Research* 108(D1), 11-1- 11-16. 2003.
1932. Ezer, Tal, Oey, Lie-Yauw, Lee, Hyun-Chul, and Sturges, Wilton. The variability of currents in the Yucatan Channel: Analysis of results from a numerical ocean model. *Journals of Geophysical Research* 108(C1), 12-1 - 12-13. 2003.
1933. Waliser, D. E., Lau, K. M., Stern, W., and Jones, C. Potential predictability of the Madden-Julian oscillation. *BAMS* 84(1), 33-50. 2003.
1934. Hinson, D. P., Wilson, R. J., Smith, M. D., and Conrath, B. J. Stationary planetary waves in the atmosphere of Mars during southern winter. *Journal of Geophysical Research* 108(E1), 4-1 - 13. 2003.
1936. Hewitt, C. D., Stouffer, R. J., Broccoli, A. J., Mitchell, J. F. B., and Valdes, Paul J. The effect of ocean dynamics in a coupled GCM simulation of the Last Glacial Maximum. *Climate Dynamics* 20(2/3), 203-218. 2003.
1937. Rutherford, S., Mann, M. E., Delworth, T. L., and Stouffer, R. J. Climate field reconstruction under stationary and Nonstationary Forcing. *Journal of Climate* 16(3), 462-479. 2003.
1938. McKinley, Galen A., Follows, Michael J., Marshall, John, and Fan, Song-Mai. Interannual variability of air-sea O₂ fluxes and the determination of CO₂ sinks using atmospheric O₂/N₂. *Geophysical Research Letters* 30(3), 1-1 to 1-4. 2003.
1939. Lanzante, John R., Klein, Stephen A., and Seidel, Dian J. Temporal homogenization of monthly radiosonde temperature data, Part 1: Methodology. *Journal of Climate* 16(2), 224-240. 2003.
1940. Lanzante, John R., Klein, Stephen A., and Seidel, Dian J. Temporal homogenization of monthly radiosonde temperature data, Part II: Trends, sensitivities, and MSU comparison. *Journal of Climate* 16(2), 241-262. 2003.
1941. Hotinski, R. M. and Toggweiler, J. R. Impact of a Tethyan circumglobal passage on ocean heat transport and "equable" climates. *Paleoceanography* 18(1), 7-1 thru 7-15. 2003.

1942. Tie, Xuexi, Emmons, Louisa, Horowitz, Larry, Brasseur, Guy, Ridley, Brian, Klonecki, Andrzej and others. Effect of sulfate aerosol on tropospheric NO_x and ozone budgets: Model simulations and TOPSE evidence. *Journal of Geophysical Research* 108(D4), 12-1 thru 12-15. 2003.
1942. Tie, Xuexi, Emmons, Louisa, Horowitz, Larry, Brasseur, Guy, Ridley, Brian, Klonecki, Andrzej and others. Effect of sulfate aerosol on tropospheric NO_x and ozone budgets: Model simulations and TOPSE evidence. *Journal of Geophysical Research* 108(D4), 12-1 thru 12-15. 2003.
1943. Lee, Hyun-Chul and Mellor, George L. Numerical simulation of the Gulf Stream System: The Loop Current and the deep circulation. *Journal of Geophysical Research* 108(C2), 25-2 thru 25-16. 2003.
1944. Erlick, Carynelisa and Ramaswamy, V. Note on the definition of clear sky in calculations of shortwave cloud forcing. *Journal of Geophysical Research* 108(D5), 2-1 thru 2-5. 2003.
1945. Zhang, S. and Anderson, J. L. Impact of spatially and temporally varying estimates of error covariance on assimilation in a simple atmospheric model. *Tellus* 55A(2), 126-147. 2003.
1946. Toggweiler, J. R., Genanadesikan, A., Carson, S., Murnane, R., and Sarmiento, J. Representation of the carbon cycle in box models and GCM's: 1. Solubility pump. *Global Biogeochemical Cycles* 17(1), 26-1 to 26-11. 2003.
1947. Toggweiler, J. R., Murnane, R., Carson, S., Gnanadesikan, A., and Sarmiento, J. Global Biogeochemical Cycles 17(1), 27-1 to 27-13. 2003.
1948. Banfield, D., Conrath, B. J., Smith, M.D., Christensen, P. R., and Wilson, R. John. Forced waves in the martian atmosphere from MGS TES nadir data. *ICARUS* 161(2), 319-345. 2003.
1949. Braganza, K., Karoly, D. J., Hirst, A. C., Mann, M. E., Stott, P., Stouffer, R. J., and Tett, S. F. B. Simple indices of global climate variability and change: Part I - variability and correlation structure. *Climate Dynamics* 20, 491-502. 2003.
1950. Anderson, Jeffrey L. A local least squares framework for ensemble filtering. *Monthly Weather Review* 131, 634-642. 2003.
1951. Finegold, Kirsten L. and Eltahir, Elfaith A. B. Atmospheric controls on soil moisture-boundary layer interactions: Three-dimensional effects. *Journal of Geophysical Research* 108(D8), 10-1 - 10-21. 2003.
1952. Russell, J. L. and Dickson, A. G. Variability in oxygen and nutrients in South Pacific Antarctic intermediate water. *Global Biogeochemical Cycles* 17(2), 2-1 - 2-11. 2003.
1953. Orlanski, Isidoro. Bifurcation in Eddy Life Cycles: Implications for storm track variability. *Journal of Atmospheric Sciences* 60(8), 993-1023. 2003.
1954. Schneider, Tapio, Held, Isaac M., and Garner, Stephen T. Boundary effects in potential vorticity dynamics. *Journal of Atmospheric Sciences* 60(8), 1024-1040. 2003.
1955. Gao, Yuan, Fan, Song-Miao, and Sarmiento, Jorge L. Aeolian iron input to the ocean through precipitation scavenging: A modeling perspective and its implication for natural iron fertilization in the ocean. *Journal of Geophysical Research* 108(D7), 7-1 - 7-10. 2003.
1957. Shine, K. P., Lanzante, J., Klein, S., Ramaswamy, V., Schwarzkopf, M. D. and others. A

comparison of model-simulated trends in stratospheric temperatures. *Quarterly Journal of the Royal Meteorological Society* 129, 1565-1588. 2003.

1958. Phillips, V. T., Choularton, T. W., Hogan, R. J. and others. Simulations of the glaciation of a frontal mixed-phase cloud with the Explicit Microphysics Model. *Quarterly Journal of the Royal Meterorological Soceity* 129, 1351-1371. 2003.

1959. Fan, Songmiao, Sarmiento, Jorge and others. TransCom3 CO₂ inversion intercomparison: 1. Annual mean control results and sensitivity to transport and prior flux information. *Tellus* 55B, 555-579. 2003.

1959. Stouffer, R. J. and Manabe, S. Equilibrium response of thermohaline circulation to large changes in atmospheric CO₂ concentration. *Climate Dynamics* 20, 759-773. 2003.

1960. Wang, Huiqun, Richardson, Mark I., Wilson, R. John and others. Cyclones, tides, and the origin of a cross-equatorial dust storm on Mars. *Geophysical Research Letters* 30(9), 41-1 to 41-4. 2003.

1961. Gnanadeiskan, Anand, Sarmiento, Jorge L., and Slater, Richard D. Effects of patchy ocean fertilization on atmospheric carbon dioxide and biological production. *Global Biogeochemical Cycles* 17(2), 19-1 to 19-17. 2003.

1962. Williams, G. P. Jovian Dynamics, Part III: Multiple, Migrating, and Equatorial Jets. *Journal of the Atmospheric Sciences* 60, 1270-1296. 2003.

1963. Findell, Kirsten L. and Eltahir, Elfait A. B. Atmospheric controls on soil -moisture boundary layer interactions. Part 1: Framework development. *Journal of Hydrometeorology* 4, 552-569. 2003.

1964. Findell, Kirsten L. and Eltahir, Elfait A. B. Atmospheric controls on soil -moisture boundary layer interactions. Part II: Feedbacks within the Continental United States. *Journal of Hydrometeorology* 4, 570-583. 2003.

1966. Philander, S. George and Federov, Alexey V. Role of tropics in changing the response to Milankovich forcing some three million years ago. *Paleoceanography* 18(2), 23-1 to 23-11. 2003.

1967. Dixon, Keith W., Delworth, THomas L., Knutson, Thomas R., Spelman, Michael J., and Stouffer, Ronald J. A comparison of climate change simulations produced by two GFDL coupled climate models. *Global and Planetary Change* 37, 81-102. 2003.

1968. Mischna, Michael A., Richardson, Mark I., Wilson, R. John, and McCleese, Daniel J. On the orbital forcing of Martian water and CO₂ cycles: A general circulation m,odel study with simplified volatile schemes. *Journal of Geophysical Research* 108(E6), 16-1 to 16-25. 2003.

1969. Papadakis, Matheos P., Chassagnet, Eric P., and Hallberg, Robert W. Numerical simulations of the Mediterranean sea outflow: impact of the entrainment parameterization in an isopycnic coordinate ocean model . *Ocean Modeling* 5, 325-356. 2003.

1970. Tippett, Michael K., Anderson, Jeffrey L., Bishop, Craig H., Hamill, Thomas M., and Whitaker, Jeffrey S. Ensemble Square Root Filters. *Monthly Weather Review, Notes and Correspondence* 131(7), 1485-1490. 2003.

1971. Leroy, S. S., Yung, Y. L., Richardson, M. I., and Wilson, R. J. Principal modes of variability of

- Martian atmospheric surface pressure. *Geophysical Research Letters* 30(13), 40-1 to 40-4. 2003.
1972. Williams, G. P. Jet Sets. *Journal of the Meterological Scoeity of Japan* 81(3), 439-476. 2003.
1973. Federov, A. V., Harper, S. L., Philander, S. G., Winter, B., and Wittenberg, A. How predictable is El Nino? *BAMS (Bulletin of the American Meterological Society)* 84(7), 911-919. 2003.
1974. Kushner, Paul J. Circulation, vorticity, and potential vorticity. *Handbook of Weather, Climate, and Water: Dynamics, Climate, Physical Meteorology, Weather Systems, and Measurements*, 21-38. 2003.
1975. Battle, Mark, Bender, Michael, Hendricks, Melissa B., Ho, David t., Mika, Robert, McKinley, Galen, Fan, Song-Maio, Blaine, Tegan, and Keeling, Ralph F. Measurements and models of the atmospheric Ar/N₂ ratio. *Geophysical Research Letters* 30(15), 2-1 to 2-4. 2003.
1976. Barker, H. W., Freidenreich, S., Ramaswamy, V and others. Assessing ID atmospheric solar radiative transfer models: Interpretation and handling of unresolved clouds. *Journal of Climate* 16(16), 2676-2699. 2003.
1977. Gregg, Watson W., Conkright, Margarita E., Ginoux, Paul, O'Reilly, John E., and Casey, Nancy W. Ocean primary production and climate: Global decadel changes. *Geophysical Research Letters* 30(15), 3-1 to 3-4. 2003.
1978. Liu, Junjun, Richardson, Mark I., and Wilson, R. J. An assessment of the global, seasonal, and interannual spacecraft record of the Martian climate in the thermal infrared. *Journal of Geophysical Research* 108(E8), 8-1 to 8-38. 2003.
1979. Mellor, George. The three-demensional current and surface wave equations. *Journal of Physical Oceanography* 33(9), 1978-1989. 2003.
1980. Winton, Michael. On the climate impact of ocean circulation. *Journal of Climate* 16(17), 2875-2889. 2003.
1981. Erlick, Carynelisa and Ramaswamy, V. Sensitivity of the atmospheric lapse rate to soar cloud absorption in a radiative-convective model. *Journal of Geophysical Research* 108(D16), 6-1 to 6-7. 2003.
1982. Chin, Mian, Ginoux, Paul and others. A global aerosol model forecast for the ACE-Asia field experiment. *Journal of Geophysical Research* 108(D23), 22-1 to 22-17. 2003.
1982. Williams, G. P. Barotropic instability amd equatorial superrotation. *The Journal of the Atmospheric Sciences* 60(17), 2136-2152. 2003.
1984. Ginoux, Paul and Torres, Omar. Empirical TOMS index for dust aerosol: Applications to model validation and source characterization. *Journal of geophysical Research* 108(D17), 1-1 to 1-20. 2003.
1985. Waliser, D. E., Stern, W., Schubert, S., and Lau, K. M. Dynamic predicatability of intraseasonal variability assoicated with the Asian summer monsoon. *Quarterly Journal of the Royal Meterological Society* 129, 2897-29254. 2003.
1992. Griffies, Stephen M. An Introduction to Ocean Climate modeling. *Global Climate*. 55-79. 2003.
1993. griffies, Stephen M. An introduction to linear predictability analysis. *Global Climate*. 80-101. 2003.

1995. Swenson, Sean, Wahr, John, and Milly, P. C. D. Estimated accuracies of regional water storage variations inferred from the Gravity Recovery and Climate Experiment (GRACE). *Water Resources Research* 39(8), 11-1 to 11-13. 2003.
1998. Zhang, Chidong, Mapes, Brian E., and Soden, Brian J. Bimodality in tropical water vapour. *Quarterly Journal of the Royal Meteorological Society* 129(594), 2847-2866. 2003.
2005. Klinne, S., Lohmann, U., Feichter, J., Ginoux, P. and others. Monthly averages of aerosol properties: A global comparison among models, satellite data, and AERONET ground data. *Journal of Geophysical Research* 108(D20), 3-1 to 3-42. 2003.
2006. Reichler, Thomas, Dameris, Martin, and Sausen, Robert. Determining the tropopause height from gridded data. *Geophysical Research Letters* 30(20), 6-1 to 6-5. 2003.
2007. Galanti, Eli, Tziperman, Eli, Harrison, Matthew, Rosati, Anthony, and Sirkes, Ziv. A study of ENSO prediction using a hybrid coupled model and the adjoint method for data assimilation. *Monthly Weather Review* 131(11), 2748-2764. 2003.
2008. Waliser, D. E. Jin K., Kan, I-S, Stern, W. F., Schubert, S. D., Wu, M. L. C., Lau, K-M, Lee, M-I, Krishnamurthy, V., Kitoch, A., Meehl, G. A., Galin, V. Y. and others. AGCM simulations of intraseasonal variability associated with the Asian summer monsoon. *Climate Dynamics* 21(DOI 10:1007/s00382-003-0337-1), 423-446. 2003.
2009. Horinouchi, T., Pawson, S., Shibata, K., Wilson, R. J., Hamilton, K. and others. Tropical cumulus convection and upward-propagating waves in middle-atmosphere GCM's. *Journal of Atmospheric Sciences* 60(22), 2765-2782. 2003.
2010. Lapeyre, G. and Held, I. M. Diffusivity, kinetic energy dissipation, and closure theories for the poleward eddy heat flux. *Journal of the Atmospheric Sciences* 60(23), 2907-2916. 2003.
2011. Karoly, Daivid J., Braganza, Karl, Stott, Peter A., Broccoli, Anthony J., Dixon, Keith W. and others. Detection of a human influence on North American climate. *Science* 302(5648), 1200-1203. 2003.
2012. Donner, Leo J. and Phillips, Vaughan T. Boundary layer control on convective available potential energy: implications for cumulus parameterization. *Journal of Geophysical Research* 108(4701), 7-1 - 7-12. 2003.
2013. Schneider, Edwin K., DeWitt, David G., Rosati, Anthony and others. Retrospective ENSO forecasts: Sensitivity to atmospheric model and ocean resolution. *Monthly Weather Review* 131(12), 3038-3060. 2003.
2014. Gregg, W. Watson, Ginoux, Paul, Schopf, Paul S., and Casey, Nancy W. Phytoplankton and iron: validation of a global three-dimensional ocean biogeochemical model. *Deep-Sea Research II* 50, 3143-3169. 2003.
2015. Milly, P. C. D., Cazenave, A., and Gennero, M. C. Contribution of climate-driven change in continental water storage to recent sea-level rise. *PNAS* 100(23), 13158-13161.
2015. Milly, P. C. D., Cazenave, A., and Gennero, M. C. Contribution of climate-driven change in continental water storage to recent sea-level rise. *PNAS* 100(23), 13158-13161.

2016. Jackson, C. S. and Broccoli, A. J. Orbital forcing of Arctic climate: mechanisms of climate response and implications for continental glaciation. *Climate Dynamics* 21(DOI 10:1007/s00382-003-0351-3), 539-557. 2003.
2016. Jackson, C. S. and Broccoli, A. J. Orbital forcing of Arctic climate: mechanisms of climate response and implications for continental glaciation. *Climate Dynamics* 21(DOI 10:1007/s00382-003-0351-3), 539-557. 2003.
2018. Leetmaa, Ants. Seasonal Forecasting: Innovations in Practice and Institutions. *Bulletin of the American Meteorological Society* 84(12), 1686-1691. 2003.
2019. Burnett, William H., Gordon, Arnold L., Mellor, George L. and others. The pacific/Indian Ocean pressure differennce and its influence on the Indonesian Seas circulation: Part 1 - the study with specified total transports. *Journal of Marine Research* 61, 577-611. 2003.
2020. Kanmenkovich, Vladimir M., Burnett, WilliamH., Gordon, Arnold L., and Melor, george L. The pacific/Indian Ocean pressure differennce and its influence on the Indonesian Seas circulation: Part II - the study with specified sea-surface heights. *Journal of Marine Research* 61, 613-634. 2003.
2023. Broccoli, Anthony J. , Dixon, Keith W., Delworth, Thomas L., Knutson, Thomas R., and Stouffer, Ronald J. Twentieth -century temperature and precipitation trends in ensemble climate simulations including natural and anthropogenic forcing. *Journal of Geophysical Research* 108(D24), 16-1 to 16-13. 2003.
2024. Horowitz, Larry W., Walters, Stacy, Mauzerall, Denise L., Emmons, Louisa K. and others. A global simulation of tropospheric ozone and related tracers: Description and evaluation of MOZART, version 2. *Journal of Geophysical Research* 108(D24), 16-1 to 16-18. 2003.
2025. Hinson, D. P. and Wilson R.J. Temperature inversions, thermal tides, and water ice clouds in the Martian tropics. *Journal of geophysical Research* 109(_01002), 1-15. 2003.